432 MHz AND ABOVE EME NEWS

OCTOBER 1998 VOL 27 #11

ALLEN KATZ, K2UYH Editor

ENGR DEPT., THE COLLEGE OF NEW JERSEY, TRENTON, NJ 08650-4700 (W 609-490-2817 OR H 443- 3184, FAX 609-443-1713, AND EMAIL:

<u>Allen Katz, K2UYH</u>

PRODUCTION ASSIST: TOM KIRK, KA2VAD (908-521-2049).

NETNEWS EDITOR: G4RGK, DAVID DIBLEY

SKEDS CORD & DIRECTORY: **DL4EBY/DK0TU, KLAUS TIEDEMANN,** HALSKESTR.35, D-12167 BERLIN, (49-30-7955467), E-Mail:

Klaus Tiedemann.

E-MAIL LIST CORD: Scott KD4LT

*** NA EME BBS: 704-284-4854 ***

EME NETS

14.345, 10 AM ET SATURDAYS, AFTER VARO NET SUNDAYS:

- NET CONTL: JOE, K1RQG (207-469-3492), E-MAIL: Joe, K1RQG
- EME STANDINGS: JIM STARKEY, W0KJY, 3845 CAPITOL DRIVE, FT. COLLINS, CO 80526, (970) 226-0669)
- THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT:

432 MHZ AND ABOVE NEWSLETTERS.

432 MHz AND ABOVE CHAT line

432 AND ABOVE PHOTOGALLERIES

CONDITIONS

The Sept SW yielded very mixed reports. Signal quality and related copiability are the aspect of conditions I find most important. I found signal quality generally poor on both 432 and 1296 during the SW, yet others found conditions excellent. Ron, KA0RYT/0 found conditions good

enough to make 32 initials from his portable location in NB! When you are working new ones, conditions always seem to be a little better. And there were a number of new stations to work during the SW.

NOVEMBER MICROWAVE EME CONTEST

Plans have move faster than most of us expected. Thanks to the efforts of WB5LUA, W5ZN and WA8WZG there will be an EME contest for the bands 13 cm and up this Nov. This contest will fill the month gap between the ARRL EME Contest Weekends in Oct and Dec. Preliminary rules are listed at the end of this NL.

DJ9YW

Heinrich writes -- I worked on 23 cm on 5 Sept HA5SHF for initial #97 - a good signal without QSB from his new circular feed, and on 13 Sept N6BQ and VE1ALQ. Heard were SM4DHN, OE5JFL, ZS6AXT, GW3XYW, W7CS, K5JL, HB9BBD, OZ6OL, SM3AKW, DF3RU, EA3UM, DL6YDH and 9H1ES (449). I need QSLs from DJ7FJ, DL6YDH, I5MPK, OH2DG, OZ6OL, SM5DGX, SM6CKU, W0KJY and WA9FWD. The station is now a 4.5 m dish with 360 w at the feed from JO42qa. I am looking for 1296 skeds for all weekends. My Fax is ++49 5155 983256 and my new e-mail: Heinrich, DJ9YW

DK3FB

Ruediger had 2 70 cm contacts during last SW. He worked VE1ALQ and N4GJV . Some others were heard, but too weak to copy complete calls.

DL3EAG

Stephan was active on 432 during the Sept SW -- I had contacts with N4GJV, JA5OVU and SM2CEW. Heard were IK5QLO and a W7Q?. Amazing for me was that N4GJV and SM2CEW came back on my CQ call on my 1st try. Since last time I changed PAs and am now using an RIW with about 900 w out. I'm still limited in elevation (max 30 degs at moon set). My e-mail address is still wrong in the database. It should be changed to: DL3EAG I also have my own home page now at:

DL3EAG for NA and

Stephan for Europe.

DL4PV

Guenter reports that on 23 cm his station worked during the SW ZS6AXT, HA5SHF, OH2DG, JA6CZD, DF3RU, K4QI, PA3CSG, HB9BBD on SSB, SM4DHN and G3LQR. Ralf, DL2FDK was the guest operator. Guenter is very interested in trying EME FAX. He wonders if any of the bigger stations is interested in running tests with him on receive or transmit of FAX.

G4ERG

Peter has not been too active on 432 over the summer, but should be heard more in the fall -- I finally completed the new HPA (2x3CX800a7s). All appears to be FB apart from the EHT transformer which is getting quite hot after a few hours of operation. I also replaced my preamp with MGF1302/3SK97 silver plated 4:1 balun and generally tidied up the open wire phasing lines. I'm now measuring 2/3 dB from Cygnus A and .5 dB from Cassiopeia A and wonder how that compares with others. I worked back in April WE2Y for initial #110, 7M2PDT, JA5OVU, DF3RU and K0RZ, in July K1FO and UR5LX, and in Sept during Italian

Contest UR5LX, IK1MTZ #111, JA2TY #112, SM3AKW, DK3WG, VE1ALQ, W7CNK, JA4BLC, JH4JLV, YO2IS #113, IN3AGI #114, OE5EYM, K5WXN, DF3RU and K1FO. Also heard were DL9KR, EA3DXU, G3SEK, JA5OVU, KA0RYT/0, N9AB, K2UYH, W7QX, SM2CEW, N4GJV, W1ZX, VK4AFL, K0RZ, UA4TPI, UT3LL and N7LQ.

HA5SHF

Csaba's (HA5HBL) group at long last has their 1296 VE4MA circular feed working but without the scalar ring. Unfortunately they lost their TH308 and are back to a YD1270 and 100 w. They did hear for the 1st time their own echoes, and worked on 5 Sept DJ9YW (549/449), on 11 Sept OZ6OL (M/M), on 12 Sept ZS6AXT (M/449), OH2DG (M/O), W2UHI (O/429), KB2AH (559/429), PA3CSG (559/549), SM3AKW (449/339) and K2UYH (449/449), and on 13 DF4PV (449/429), HB9BBD (579/529), K5JL (559/439), K4QI (549/O), OE5JFL (569/559) and SM4DHN (559/439). All QSOs were random except DJ9YW. Totals for HA5SHF are on 1296 DXCC 15, WAS 5, and initial #26.

HB9BBD

Dominique's Sept SW was reduced to the Sunday morning due to business trip to Bordeaux. He logged on 12 Sept 2230 OZ6OL (549/579) and SSB (42/54), 2257 JH5LUZ (559/589) and SSB (55/57), on 13 Sept 0530 ZS6AXT (569/589), 0550 W2UHI (579/589) and SSB (55/55), 0615 K4QI (579/569 and SSB (57/56), 0655 HA5SHF (529/579) and SSB (41/54), 0651 OH2DG (569/579), 0658 K5JL (599/589), 0700 DF4PV (57/59) SSB, 0716 DF3RU (51/55) SSB, 0721 OE5JFL (57/57) SSB, 0745 K3HZO (529/549), 0807 VE1ALQ (589/599), 0818 W7CS (559/579) and just before the window closed (after 10 min of trying) 0836 IK3COJ (419/O). Normally IK3COJ comes in loud, Dominique wonders if his power was down this time?

IK5QLO

Andrea found disappointing conditions during the Italian EME Contest -- Apart from the bad WX, I Heard a lot of stations, but found it almost impossible to make myself heard. I worked on 12/13 Sept JA5OVU, JA4BLC and OE5EYM. Heard and CWNR were JH4JLV, JA2TY, DL9KR, SM3AKW, K0RZ, N4GJV, KA0RYT/0, DK5FB(?) and K2UYH - called many times.

JA4BLC

Yoshiro EME report for Sept -- I trouble with my dish drive electronics this summer. The sockets of the relays in the drive controller were all rusty after 15 years in my garden and needed replacement. The personal computer used tracking the Moon also started acting up. I replaced both in Aug. During ARI Contest I worked on 70 cm YO2IS, K1FO, KA0RYT/0 for initial #246, JA5OVU, UR5LX, SM3AKW, G4ERG, IK5QLO, DJ6MB and JH1EFA, and on 13 cm ZS6AXT (2304/2424). My results for the contest were 11 on 2 m, 10 on 70 cm and 1 on 13 cm. Back in July I worked IK5QLO #245 on 432.

K1FO

Steve was able to be QRV during both Aug and Sept. Although his contractor started as scheduled on 4 Aug, he didn't have to remove his cables until after the Aug SW. In Sept he temporarily ran the cables back into the house and reattached all the connectors. He is planning a similar temporary setup for the ARRL EME Contest, although he will have to move all the equipment to another place in the house. Steve removed his polarity rotor for repair and therefore did not have polarity rotation in Sept. Since the EME bulletin board is going away Steve will succumb to the 90's and get e- mail at home. However he will use it mainly for activity reports. Don't expect Steve to be responsive in answering e- mails. At last count he had over 300 unread e-mails in his work e-mail system. Steve has a comment for Paul, W4HHK on the 432A

power meter. If you can't zero the meter the problem is usually the sensor (head). The thermistor can be overloaded so its resistance changes but is not burned out. Zero can be reestablished by adjustment screws in the thermistor mount. Although you may be able to get the meter to zero, drift in the readings will be worse than a pristine head since the measurement and reference thermistors will no longer match. Stations worked in Aug were on 15 Aug K5WXN partial, 16 Aug WD5AGO, G3HUL, W7CNK, KR5V, K5GW with an extremely big signal, JA2TY, JA5OVU and KL7HFQ, on 12 Sept W7QX, KA0RYT/0 for initial #535, JA5NNS, WA9FWD - very strong, VK4AFL #536, JA3SGR, JA4BLC, JA2TY and N2IQU. Steve found that he forgot to enter VK4KAZ in his initials spreadsheet. His initials this year are #528 WE2Y, #529 DL5FN, #530 SV1BTR, #531 W7CNK, #532 KU3T, #533 UT3LL, #534 VK4KAZ, #535 KA0RYT/0 and #536 VK4FAL. 70 cm EME totals for K1FO are #536 initials, 49 states and 75 DXCC.

K3HZO

Harry reports on his Sept 1296 activity -- I completed on 7 Sept with W6HD and K9BCT/4, and on 13 Sept with DF9QX, WA8WZG, and W7GBI. I also worked on 13 Sept SM4DHN, OE5JFL and HB9BBD on random for a total of 7 initials. This brings my initial count to #45 on 23 cm. I am QRV for additional skeds.

K8GP

Jim (K3LFO) reports on the K8GP EME portable/Sept contest station in WVA -- Unfortunately operation did not go without a hitch! Out of all the skeds we only completed 2 (DL9KR and W1ZX). I did hear some of the others, but just couldn't do better than (T) copy. The problem was operating in a contest environment. We had constant front end overload form all the 1500 w transmitters operating around us. The solid state sequencer kept chattering the TR relays due to RF getting into the control lines. TX power was down to 1200 w due to a transverter failure and replacement. We had a high noise level even when all the other stations were off. Upon taking down of the antenna we found a connector had pulled loose disconnecting half the array and thus reducing us to 4 antennas. I think this was the source of our noise as well. The bottom line was that the EME part of our operation wasn't too successful. We will be back next year with an all new antennas and preamps. Thanks to all who ran with us and a special thanks to Joe K1RQG. [And TNX to you for your effort.]

KA0RYT/0

Ron writes -- I would 1st like to thank all who gave us a 432 EME contact while we (KB0TZA, KB0MNK and myself) were out in NB on 432 EME. Condx were very good, and my echoes were always there except on Sunday (after aprox 1200). The signals received had a lot of extra QSB and were a lot weaker than earlier (echoes were still copiable). We were running 1.5 kw into a 4 x 24 el array, with a HB cavity preamp that was running 0.24 dB NF. The following is a preliminary list of stations worked: KB3PD, W0KJY, UR5LX, SM3AKW, W7CNK, N9AB, PA3CSG, OK1KIR, DK3WG, DL9KR - he was very loud so I asked Jan to go to SSB, OZ4MM, SM2CEW, W7QX, N4GJV, K0RZ, VE1ALQ, W1ZX, K1FQ, KD4LT, WA9FWD, JA5QVU, JA4BLC, DF3RU, OE5JFL, G3SEK, G4RGK, UT3LL, EA3DXU, DL8OBU, K2UYH, WA4NJP and W7BBM - extremely difficult contact. We did miss 2 repeat skeds on Sunday due to the fact that rain was being forecast for that afternoon (and rain it did!), so we started packing earlier than planned. If ANY of these stations now want NB confirmed, please send your OSL to my home address here in MN. (I QSL 100%). I do apologize for missing anyone on 432 EME from there. There were 3 - 4 stations calling at times! I was the only 432 operator and found staying alert/awake quite a challenge at times. I hope to go portable again, and am curious as to where (around MN) 432 EME operation is needed?

LU6DW

Marc's group came on for skeds during the Sept SW and worked on 1296 K2UYH and K5JL. He notes that at the time of these QSOs the Moon is in a position where it is very close to being blocked by a wall. When they finished with me about 1/3 of the dish was obstructed. When they finished with Jay about half the dish surface was blocked. They were unable to complete with VE1ALQ, who called me afterwards. Marc does not expect to be active for the Oct SW as he will be in the US for the Microwave Roundup Conference and hopes to visit NJ. He reports that Dany, LU8EDR got a 5 m dish, with full EL-AZ positioning. The antenna is completely disassembled, and needs minor maintenance work, but is already at his house.

N6BO

Hoppy's Sept 23 cm EME activity report follows -- I worked on 12 Sept KB2AH, ZS6AXT, SM3AKW and DL2FDK for initial #128. I CWNR HA5SHF and had a near miss with K2UYH due to QSB. My receive appeared to be intermittent so we replaced the IF transceiver for the upcoming night. I QSO'd on 13 Sept VE1ALQ, GW3XYW, OE5JFL, SM4DHN, OZ6OL, DJ9YW, W7CS, and EA3UM. I did not work either 9H1ES and HA5SHF on schedule but did hear another station sending me (O's) on the sked frequency. I replaced the anode bypass capacitor on my TH327, but this didn't resolve the problem. Power output this weekend was only 250 w with the TH328 PA. I will be QRT the next 8 weeks for medical treatment, but hope to be back on for the Dec portion of the EME contest. There is a possibility WA6KBL and myself can be QRV from his QTH with a 5 m dish and TH-327 PA in Dec. We plan to use this dish for both 23 cm and 3 cm and the project is progressing quite well. A SCR-584 radar mount will be used along with F1EHN's tracking software for antenna control and pointing. Precision position indicators have been obtained for both axis so we are confident the antenna pointing accuracy will be adequate for 3 cm operation.

N7LO

Shawn writes -- I finally worked UR5LX for initial #10 on 432. He had good signals with a lot of QSB. I completed at 0816 on 13 Sept. My thanks to Sergej for taking the time to try this, over and over. I think this was our 5th attempt. I heard quite a few other stations, but couldn't get anyones attention. I heard part of KA0RYT's skeds but the QSB was just killing his signal.

OE5EYM

Ernst gives us a short description of his EME station -- I am located at JN68sk and use a 13 m dish, f/D=0.5, with switchable H/V pol for both 2 m and 70 cm. The whole antenna is homebuilt with hydraulic elevation control and OE5JFL's autotracking system. On 2 m and 70 cm I use a YL1050 PA with good power. For 23 cm a IMU feedhorn, FHX35 Preamp and 12 w RF from a module are working on the bench. I hope to be QRV on 23 cm with 200 w in the ARRL EME Contest. My address is (Ernst Harant, Wolfsedt 20, A- 4775 Taufkirchen P, AUSTRIA; Tel ++43 7719 7756 and no e-mail).

OZ4MM

Stig was motivated by the Paris Conference -- Back home I have remounted the 432 feed system in the dish and changed the Transco relays to HF400. With the same preamp I see improvements in both CS/G and Sun noise. The Sept SW was initial test, and the new feed looks good. I run a K2RIW PA on 432 and see nearly 700 w at the feedpoint after 45 m of 1 5/8" feedline. I could only be on for 2 hours during this SW, and worked on 432 on 12 Sept KA0RYT/0 (559/559) for initial #158, SM2CEW (559/569), W7CNK (559/559) #159, K7XD (559/559), UA4API (539/559) and W7QX (549/549). Concerning Ron, KA0RYT's, expedition to Nebraska only one comment! If every 4 yagi station could put out a signal like Ron's, the band would be very crowed! I found Ron's signal very constant. He really did an outstanding job.

PAOPLY

Jan's 3 cm system is progresses slowly -- I am still working on my 10 GHz system. I am waiting for the chainwheel to get the thing running in azimuth. Elevation is all ok and so is the TX with up to 50 w out. I plan to install a 200 w TWTA later. In the last EME NL W4HHK was lookiing for HP432A schematic and guidance. I recently bought 2pcs HP432A and 1 pc HP432C including documentation and several heads. (BB up to 10 Ghz and WG for 10/18Ghz.) I have these items for sale.

SV1BTR

Jimmy was on 432 for all his 11 Sept skeds but blew his LNA during his sked with G4RGK. He also discovered a problem with his elevation actuator as he was taking the antennas down. He thus had to cancel all his 12 Sept skeds. Jimmy will be active again in Oct.

UR5LX

Sergej was active on 12/13 Sept for the ARI Contest. He QSO'd 20 stations including KA0RTY/0 for WAS 40 and initial #349, JA3SGR #350 (1 Yagi and 400 w) and N7LQ in NV for WAS 41 and #351. Sergej now only needs KH6, KY, NM, ND, RI, UT, VT, SD, WY to complete WAS. He hopes to be QRV on 1296 in 1999 and notes he received an FT736X from JA3JM. He sends TNX to JA3JM and JA9BOH for their help in obtaining the 736.

UT3LL

Valery is active on 432 using 4 x 27 el BV (OPTO-70) yagis with open wire feedline, 400 w PA, 0.8 dB (3P320A-2) LNA from KO80ac. He worked on 12 Sept at 0550 VE1ALQ (549/549), 0630 K0RZ (539/549), 0650 KA0RYT/0 (549/539), 0702 N9AB (539/539), 2113 UR5LX (539/559), 2134 JA4BLC (O/549), 2233 JA5OVU (559/549) and 2359 DL9KR (559/569), and on 13 Sept 0441 N2IQU (439/549), 0732 SM2CEW (549/539), 0802 KA0RYT/0 (549/549), 0838 OE5EYM (539/569), and 0938 N4GJV (549/549). Valery can be reached at e-mail: Valery, UT3LL

VE1ALQ

Darrell writes -- It has been some time since I have sent in a report. I really enjoyed the Conference in Paris. Many thanks to all in France for a great job. Both my XYL and myself were quite tired when we arrived in France because we had been on a tour coach from England to Belgium, Netherlands, Germany and Switzerland before arriving in France, and then back to England Sunday morning - the conference was on the wrong end of our trip, HI. I can now apply faces to many of the Eur calls which is great, but feel bad for not having an eye ball QSO with all who were there. This was partly due to being in a different Hotel than any of the conference attendees. I believe all conferences should be 4 to 5 days long with 2 days just for eye ball QSOs. The Sept SW was quite enjoyable with 3 initials. On 70 cm I added UT3LL, UA4API and KA0RYT/0 from EN02 for now a total of #159. Conditions on 70 cm were a bit funny. W7CNK was vert, W7QX was 45 deg CCW, N9AB was horizontal and most of Eur appeared hor. I heard nothing out of Eur that was not hor. On 1296 I had a partial with LU6DWI. No QRO due to window problems at DWI's end. I also lost a tube in my 23 cm driver and replaced it with a 7289 that had a bad water leak, I then replaced that tube with one having very low on emission, but number 3 worked FB after the water was cleaned up. I though conditions were quite good on both bands, but activity was rather low. Perhaps a lot of us are waiting for the ARRL EME contest.

W1ZX

Willie was on 70 cm and QSO'd on 19 July at 1100 W7CNK (559/559) for initial #278, 1130 K7XD (O/O) #279, breakfast break, and 1300 KL7HQF (339/559) #280. Willie heard many

stations off the Moon and would like a sked with GW3XYW. Willie also still needs Kentucky for WAS 50 State, any ideas? Willie, 2 months ago worked W5ZN #280 (ARK.) for his 48 State. He added on 12 Sept KA0RYT/0 (559/559) #281 in Neb state 49, and on 13 Sept K8GP (O/O) #282. Willie has a 1296 MHz W2IMU horn just about ready to mount to listen on 1296, but no amplifier at this time. Willie will not be QRV in the 1st weekend of the ARRL EME Contest, but will on for the Dec weekend. Willie be in NH and Maine on Holiday.

W7OX

Jerry had a good time during the Sept SW on 432 -- I worked the following stations KA0RYT/0, OZ4MM, UR5LX, VE1ALQ, OK1KIR, W7CNK, PY5ZBU, K1FO and JH4JLV. I also CWNR DL3EAG. Heard were W1ZX (549), G4ERG (339) and an Italian station. I also heard VK4AFL and K1FO in QSO. I worked VK4AFL on 8 Sept and JA5OVU (559-559) on 9 Sept.

WD5AGO

Tommy writes -- Just got the 23 cm station back together. Rebuilt feed, updated my LNA (about 0.1 dB NF lower than my last circuit), and went back to 2 2-tube 7289 amps phased at 90 deg. PA is working great. I hope to be on the 1st night of the ARRL Contest doing demonstrations for area young hams. The last station worked here was the French EME group, which was through the trees with 100 w.

ZS6AXT

Ivo was disappointed by the turn out for the Italian EME Contest -- I heard Italian stations on 23 and 13 cm during the contest! My SW and Contest weekend was quite upsetting. We had nice WX for weeks. Then on Friday it started with overcast windy weather with occasional drizzle. On Monday the Sun shining again and no wind! [Have you heard of Murphy's Law?] I started on 13 cm to make a QSO with JA4BLC just after 0200 on Saturday. Just before my YD1304 PA was giving me well over 150 w and echoes were really good (559). Then suddenly my HV PSU was not giving me any output! Fuses OK, so quickly I pull the panel out and the 2 protective series resistors for the diodes were burned. Quick replacement sorted this out and some 15 minutes later was back on the air again. Fortunately Yoshiro was still there and we made it with no problems (579/549). A few more COs with no response, so OSY to 23 cm. Echoes there like I never heard before, but no stations. Two hours later I worked OZ4OL and then HA5SHF. Another hour and DF4PV appeared with good signals for initial #138. Another 30 minutes and OH2DG was worked. More than hour later I worked W2UHI, KB2AH, SM3AKW, K2YUH, N6BQ, W6HD #139 and PA3CSG on the horizon. No more Eur stations! On Sunday early it started to drizzle with gusty wind. But I worked JA6CZD, DF3RU, OH2DG and early morning HB9BBD. I then QSY'd to 13 cm. Called CQ there for a while, then W5LUA appeared at 0650 with nice signal (579/569) and suddenly my EL indication went haywire, probably water in it. Despite that (I had to find the Moon by own echoes) I worked WA8WZG (O/O). Further CQs did not bring anyone else, so back to 23 cm and here I worked K5JL, GW3XYW and HB9BHU, while CWNR G3LQR and heard VE1ALQ, W7CS, OE5JFL and few others, but I was on the horizon according to my computer, EL indication still didn't work. So 2 sleepless night brought only 17 OSOs on 23 and 3 on 13 cm. There were also funny conditions at the end of pass. I thought that I am off the Moon, since I had no EL indication. But later I heard from others that it was so. On our bulletin it was reported that there was a massive solar flare during the early morning hours. So that explains it. The absence of Italian stations of course in their Contest is puzzling. It was the same last year. The Eur stations were also scarce and the W stations came on bit late, so I missed quite a few. I hope that the activity in the ARRL Contest will be better!

Conditions did not seem to be particularly good. I found signals to be watery on both 432 and 1296, and few stations interested in exchanging grids for contest points, but still I had a fine time during the Sept SW. I decided to mount my 432 feed offset from my 1296 feed. This will allow me to switch rapidly from 1296 to 432 and vice verse. I ran this way several years ago, but always felt that my 432 performance was degraded a bit by not having the feed in the center. At the time I did not want to lose even a tenth of a dB on 432. But today with my 70 cm noise problems and limited window, I will probably end up making more 70 cm contacts with the offset as I will be on 70 cm more often. I tried to be on 432 the 1st night of the SW, but had polarization rotator problems. The rotator was intermittent. It would work under every condition except when properly mounted with the feed in place. I thought it was a wire or connector problem. I thus operated 1296 on Saturday and worked on 12 Sept at 0723 N6BQ (559/339) - partial as Hoppy never got my report, 0730 KB2AH (57/55) on SSB, 0747 ZS6AXT (559/559), 0805 HA5SHF (449/559), 0821 SM3AKW (55/56) on SSB, 0840 DF3RU (449/549), 0849 DL2FDK (559/549) for initial #157, 0859 NU7Z (549/549), 0925 W7CS (549/559) #158, 0955 OZ6OL (449/559) and 1005 W6HD (449/559). The next day after much frustration, I went to Radio Shack and purchased a new rotator. This solved the pol rotation problem! I also had preamp problem on 70 cm. After fixing the rotator, I discovered my 432 preamp was dead. This is what happens when you don't operate for several months. I switched LNA and was finally QRV on 70 cm. I then easily worked at 0830 KA0RYT/0 (559/559) and initial #596 - (Ron did a great job!), followed by at 0850 K0RZ (DM79/FN20) and 0925 OE5EMY (559/559)... But I was still having problems - one of the wires had caught and this caused the preamp to kick out during pol rotation. I finally lost the preamp altogether and at that point I gave up on 432 and switched to 1296 for QSOs at 1053 EA3UM (559/559), 1100 VE1ALQ (559/579) and 1200 LU6DW (O/O) on sked #159 and DXCC 38. I have now fixed the preamp problem and should be in good shape on both 70 and 23 cm in Oct.

NETNEWS

by G4RGK, David Dibley

DB6NT, Michael can now be reached at e-mail: **DB6NT**

F5FST: should be QRV on 70 cm with 16 x 26 el KR yagis, 1600 w PA, 0.3 dB NF LNA from (IN94SR). You can reach Michel at e-mail: Frank, F5FST or Fax +33 556 86 85 84.

K10R is temporarily QRT while he finds time to repair a dead elevation rotator.

KU3T will not be available on 432 EME skeds for a while due to heavy work load. Joe plans to dismantle the current array and rebuild with 8 yagis.

NP4B is now QRT. Bob has taken down his dish and is moving to Los Alamos, NM where he has taken a new position.

HP3XUG/KG6UH expects to be QRV on 432 for the Oct contest weekend.

W4HHK is still working on 24 GHz gear, no 13 cm activity to report.

W5ZN is QRV on 70 cm. His 5.7 GHz system is QRT for the time being. Joel hopes to be back on the microwave bands by contest time.

W4TJ has not been on the radio in a while. His QRL is taking up a lot of time. Bill does not

think he will make the 1st leg of the contest.

WF9X has acquired WA9FWD's old 432 system and working toward getting the array, preamp and PA together. Ken hopes to be on 70 cm EME by the Oct contest weekend. His grid is EN53.

VE1ZJ has his dish fixed and hopes to be back on 23 cm by Oct.

VE4MA worked AA5C for initial #4 on 10 GHz.

F5KDK will QRV on 1296 in the ARRL EME Contest.

WOKJY worked KA0RYT/0 for initial #201 on 70 cm.

NU7Z worked 6 stations on 23 cm with 240w out. N2IQU and K2UYH had watery sigs. PA3CSG, ZS6AXT and SM3AKW had good signals. W7CS and OZ6OL were initials.

W7CS worked on 23 cm OH2DG, K2UYH, GW3XYW, OE5JFL, OZ6OL, K5JL, HB9BBD and VE1ALQ, and heard SM3AKW and many others. Chuck will be QRV in Oct.

CT1DMK hopes to have 5.7 GHz on by Oct.

W2UHI heard SM6IKY working N2IQU on 23cm, and CWNR.

K9BCT/4 heard N2IQU, K5JL and W2UHI on 23 cm. He also listened on 70 cm but heard nil.

K2DH is still down from his lightning strike but has made some progress. The dish drive is now going. Dave hopes to be QRV again on 23 cm in a month or so.

W7FN is still wrestling with receiver problems.

WA9FWD is putting up a new 12' dish for 23 cm.

DK3WG heard nil from K8GP in sked. Later he copied K7XD on sked, but very weak and no report was received.

DL9KR received signals from K8GP, but observed there seemed to be long time between T-R switching. VK4AFL and IN3AGI were new ones. Jan is up to initial #699. CT1WB would have been #700 but was not complete.

CT1WB is active on 432 with 8 x 21 el F9FT yagis with open wire feed and 400-500 w from (IN51).

G4RGK worked KA0RYT/0 with big signal, but had high winds so Dave was not able to be on much.

worked VE1ALQ, JA5OVU and N2IQU but found 70 cm very quiet with little activity.

KORZ was on 70 cm and worked 6 stations including IN3AGI for an initial. Bill heard nil from K8GP in their sked.

W7CNK had a great time on 70 in Sept. Many sigs were heard including DL9KR with KA0RYT/0 on SSB, but no luck with K8GP.

W7BBM heard nil from KA0RYT/0.

K3LFO will not be on EME for the rest of winter from home due to tree blockage.

W7QX found a lot of activity on 70 cm during the Sept SW and QSO'd JA5OVU, DF3RU, SM3AKW and K0RZ. He notes that IN3AGI was not following procedure making QSOs difficult.

ON5OF is looking ideas and help planning a 3A2 EME expedition next year. [How can we help?]

UT5DL is still active on 70 cm EME and interested in skeds. Slava's new e- mail address is UT5DL

PA3CSG worked KA0RYT/0 on 70 cm and DL2FDK on 23 cm. Both were initials. Geert needs a QSL from K5AZU and NM and KY for WAS. He heard nil from K8GP in their sked.

FOR SALE

DD1XF has for sale TH 298 tubes. You can reach Frank at e-mail: DD1XF

W1ZX has for Sale: MFJ-784 Super DSP filter \$US150+shipping, HP 415A SWR Meter \$US25+shipping, HP 415E SWR Meter-brown unit (later build unit) \$US95+shipping, Several Bird 43 Wattmeters (1) \$US190 with a new meter movement, (2) Bird 43 wattmeter, fair condition (cracked/broken meter face-needs paint job) \$US120 or best o ffer + shipping, Hewlett Packard 349A UHF Noise Source \$US20, Noise Com Noise Diodes NC305, glass package \$US33+shipping, flat package \$US42+shipping. Call Willie at 301 645 5584 between 1830-2300 EST, FAX 301 645 6853, 24 hrs, e-mail: W1ZX

K1FO has for sale a Super SCAF digital audio filter, an Icom IC-271H, a CDE HAM-2 and a TR-44 rotors Steve can be reached at 203-421-3377.

NU7Z he is looking for HP audio generator.

KB2AH has a full line of cavity amps and 1, 2, 4 and 6 tube ring amps, lin/circular feed horns and LNAs for 432 and 1296. Tom also has mounting blocks for K1FO yagis. For full details see Tom's 1296 WEB page at:

Tom's 1296 WEB Page

for more details and pricing info e-mail: <u>KB2AH</u> or phone 908-223-5067, FAX 908-223-0901 (24 hrs) or voice 908- 223-8124.

TECHNICAL

JA4BLC notes the following correction to the diagram in his technical article in the Aug NL. The relation between L1, L2 and L3 given as CASE1 and CASE2 is not correct. It should be in both cases L2 = (N-0.25)*wavelength+L3-L1 where N is an integer. (Yoshiro thanks I5TDJ for

FINAL

This has been another one of those months. I had to be out of town this weekend and returned late on Sunday night. Thus this NL is another rush job. Please excuse the mistakes due to lake of sleep and lack of time.

- * There are no skeds this month because of the ARRL EME Contest.
- * IK5OLQ asks all of us to PSE NOT FORGET to SEND in your Italian EME Contest logs. Logs can be sent via e-mail to or . There are many beautifully designed awards.
- * Alberto, I2PHD, suggests we check his home page:

I2PHD and IK2CZL with HAMVIEW or Mirror site for HAMVIEW.

where you can find his program HAMVIEW, co-authored with IK2CZL, which is meant for EME use. This program functionally similar to the excellent DSP program FFTDSP by AF9Y, but it is free, and has some extra features. Similar to FFTDSP, it is a real-time filtering program for CW signals which uses the Sound Blaster in full-duplex mode, an IIR CW filter and an LMS "denoiser". I have not had a chance to experiment with HAMVIEW yet,but it sounds very interesting.

- * In additions to the EME Microwave Contest rules shown at the end of this NL W5LUA reminds us that the Nov weekend contacts do not count for the ARRL Contest. Please submit scores to Al, W5LUA. Do NOT contact ARRL for info, only W5LUA.
- * Please keep the news and technical information coming. I hope to work you all in the contest!

73, Al - K2UYH



Graphics:

Graphics section will follow, please return..

Preliminary set of rules for First Annual Microwave EME Contest

Due to the increase in the number of amateur bands where EME is used, it has become increasingly difficult to operate all bands during the EME contests. Typically a multi-band station will utilize the bands where the operator expects the highest number of QSOs. EME activity on 2304 MHz and higher generally suffers due to the rather low number of active stations and the limited amount of operating time available.

Based on comments from amateurs worldwide it appeared that there was support of a "microwave only" EME contest. Earlier in the year, WA8WZG, W5ZN,

and myself, W5LUA discussed the possibility of the ARRL sponsoring either a separate microwave EME contest or creating special categories for microwave EME within the structure of the annual EME contest. With Joel's (W5ZN) involvement and influence in the ARRL we managed to get their attention. Since there is a Region 1 scheduling conflict this year, the usual ARRL EME Contest is being held the weekends of October 10-11 and December 5-6, 1998. The rules of which are listed in the September 1998 QST, page 102. We were not able to supply the ARRL with enough information soon enough regarding the structure of the microwave EME contest. As a result, the ARRL is sponsoring "a non-competitive microwave EME weekend to be held November 7-8, 1998". After further discussions with Joel W5ZN of the ARRL, it has been decided to try to organize the event into being the first competitive Annual Microwave EME Contest. W5ZN, WA8WZG and myself propose the following set of rules. WA8WZG and KD4LT have already offered to sponsor the awards and plaques. These rules are preliminary. Constructive comments are appreciated.

The Microwave EME weekend will promote EME activity on every amateur band at 2304 MHz and higher. Although the QST column suggested microwave start at 1296 MHz, it was suggested by the consensus of attendees at the 1998 Paris EME conference that the microwave contest should only include the microwave bands at 2304 MHz and higher. Individual band awards will be issued for each single band including 2300 MHz (13 cm), 3400 MHz (9 cm), 5700 MHz (6 cm), and 10300 MHz (3 cm). Multi-band awards will also be given for best overall score on all bands 2304 MHz and higher.

Initially the microwave EME contest will be held in November 1998. As other amateurs have indicated, there may be a more optimum time of year for the contest based on weather, etc. The important factor is that if we want the ARRL to support a microwave EME contest, then we should start by taking advantage of the opportunity that the ARRL has given us.

We must participate and submit logs and make our suggestions for improving the contest next year.

1. Object:

Two way communications via earth-moon-earth (EME) on any authorized mode on each amateur radio band at 2304 MHz and higher.

2.Date and Contest Period:

Two full 24 hour UTC periods on November 7 and 8, 1998. In order to maximize the number of QSOs per band it is suggested that 13 cm be the primary band on November 7 with 3 cm being the primary band on November 8. Both 9 and 6 cm are best handled by coordinating activity windows between active stations. A suggestion made by ZS6AXT is to have 9 cm also on November 7 and 6 cm on November 8. Any other thoughts?

3.Entry Categories:

Single Operator: One person performs all operating and logging functions, equipment adjustment and antenna alignment.

Multi-Operator: Two or more persons participating at the same location.

Commercial Equipment: Stations using equipment that is not amateur owned will have their scores listed separately.

4. Exchange

A valid contact consists of receiving both call signs and reports and confirmation of both call sign and report. Partial or incomplete QSOs do not count. Stations may be worked only once per band for credit.

5. Scoring

QSO points: Count 100 points for each complete EME QSO on 13 cm and 3 cm. Count 200 points for each complete EME QSO on 6 cm and 300 points for each completed EME QSO on 9 cm.

Multiplier: Each U.S. and Canadian call area, plus each DXCC country (not US/Canada) worked via EME on each band.

Final Score: Single band entry score is determined by multiplying QSO points on a particular band by the sum of multipliers worked on the same band. Multi-band entry score is determined by multiplying the total QSO points for all bands by the sum of multipliers worked on all bands.

6. Miscellaneous:

Fixed or portable operation is permitted. Stations operating outside traditional call areas must indicate so, identifying the call area of the operating site.

Contacts may be made on CW or SSB. Only one signal per band is permitted. A transmitter, receiver or antenna used to contact one or more stations under one call sign may not be used subsequently under any other callsign during the contest, except for family stations where more than one call has been issued, and then only if the second call sign is used by a different operator.

7. Reporting:

Entries must be postmarked no later than 30 days after the close of the contest and must include complete log data and a summary sheet. The summary sheet should show a band by band breakdown of QSOs and multipliers. For at least the first year of the microwave EME contest, the contest entries should not be sent to the ARRL but rather sent to W5LUA

Al Ward,
2306 Forest Grove Estates Rd.
Allen, Texas 75002
USA
Entries can also be emailed to W5LUA. The emailaddress is:

Al Ward W5LUA

8. Awards:

Certificates/Awards will be issued to the top three stations worldwide on each single band and multi-band for both single operator and multi-operator. Additional awards will be issued where significant effort and/or competition is evident.

Al Ward W5LUA Joel Harrison W5ZN Tom Whitted WA8WZG 1998 September 26,

Most Recent 432 MHz and Above Skeds by DL4EBY et al

Most Recent Netnotes by K1RQG

Leave Contest Info or Comments to Allen Here

<u>Return</u>	
Top Page	
Rein, W6/PA0ZN	
19980928	